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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,083	04/02/2001	Krishnadas C. Kootale	020431.0790	1702

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EXAMINER	
HAMILTON, MONPLAISIR G	

ART UNIT	PAPER NUMBER
2172	10

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/825,083	Applicant(s) KOOTALE, KRISHNADAS C.	
	Examiner Monplaisir G Hamilton	Art Unit 2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-12,15-21,24-29,31 and 33* is/are rejected.

7)☒ Claim(s) *4,5,13,14,22,23,30,32 and 33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/8/03 has been entered.

The communication filed on 12/8/03 amended Claims 1, 4, 10, 13, 19, 22, 28-34. Claims 1-34 remain for examination.

Response to Arguments

2. Applicants amendment to Claims 4, 13, 22, 32, and 34 has overcome objection based on indefiniteness. Additionally the amendment to Claims 1 and 29 has overcome the 35 U.S.C. § 101 rejection. Finally, Applicant's arguments with respect to Claims 1-3, 6-12, 15-21, 24-29, 31 and 33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6-12, 15-21, 24-29, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5991732 issued to Moslares, herein referred to as Moslares.

Referring to Claims 1, 10, 19 and 28:

Moslares discloses a method for allocating data in a hierarchical organization of data, comprising: determining new values for one or more parents in the organization of data (col 15, lines 10-40); determining current values for one or more children in the organization of data, each child being hierarchically related to one or more parents (Fig 3; col 2, line 65-col 3, line 10, 35-45); determining the relationship between each parent and its children (Fig 3; col 2, line 65-col 3, line 10; col 16, lines 5-10); determining a variation for each child (col 16, lines 1-10); and determining a new value for each child by allocating the new values of the parents to the children based on the parent-child relationships, the current values of the children, and either the sum of the variations of the children or a matrix of the variations of the children (col 16, lines 1-35; col 18, lines 50-65; col 15, lines 20-55).

Referring to Claims 29, 31, and 33:

Moslares discloses a method for allocating data in a hierarchical, multi-dimensional organization for data comprising: determining demand forecasts for one or more parents in the organization of data (col 15, lines 10-20); determining current demand data values for one or more children in the organization data, each child being hierarchically related to one or more of the parents (Fig 3; col 2, line 65-col 3, line 10; 35-45); determining the relationship between each parent and its children (Fig 3; col 2, line 65-col 3, line 10; col 16, lines 5-10), the parents and children each representing storage locations within the organization of data that is uniquely identified by the positions of members in two or more dimensions of the organization of data (Fig 3; col 11, lines 35-60); determining a variation for each child, the variation calculated using statistical techniques based on the historical variation in the values of the child over a specified time period (col 15, lines 45-65; col 16, lines 1-35); and determining a new demand value for each child by allocating the demand forecasts for the parents to the children based on the parent-child relationships, the current demand values of the children, and either the sum of the variations of the children or a matrix of the variations of the children (col 16, lines 1-35; col 18, lines 50-65; col 15, lines 20-55).

Referring to Claims 2, 11 and 20:

Moslares discloses the limitations as discussed in Claims 1, 10 and 19 above. Moslares further discloses the new values of the parents represent demand forecasts to be allocated to the children data (col 15, lines 10-25; col 16, lines 20-35).

Referring to Claims 3, 12, and 21:

Moslares discloses the limitations as discussed in Claims 1, 10 and 19 above. Moslares further discloses the variation of each child is calculated using statistical techniques based on historical variation in the values of the child over a specified time period (col 15, lines 45-65; col 16, lines 1-35).

Referring to Claims 6, 15, and 24:

Moslares discloses the limitations as discussed in Claims 1, 10 and 19 above. Moslares further discloses the organization of data comprises one or more dimensions; and the parents and children are all members of the same dimension within the organization of data (col 13, lines 1-25, demand and time).

Referring to Claims 7, 16 and 25:

Moslares discloses the limitations as discussed in Claims 1, 10 and 19 above. Moslares further discloses the organization of data comprises multiple dimensions; and the parents and children are each associated with multiple dimensions of the organization data (col 13, lines 1-25, demand and time).

Referring to Claim 8, 17 and 26:

Moslares in view of Lobley disclose the limitations as discussed in Claims 7, 16 and 25 above. Moslares further discloses the parents and children each represent a storage location

within the organization of data that is uniquely identified by the positions of members in two or more of the dimensions (Fig 4; cool 16, lines 40-60).

Referring to Claim 9, 18 and 27:

Moslares disclose the limitations as discussed in Claim 7, 16 and 25 above. Moslares further discloses the organization of data comprises at least two dimensions selected from the group consisting of a time dimension, a product dimension, and a geography dimension ((col 13, lines 1-25, product and time).

Allowable Subject Matter

4. Claims 4-5 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten, in independent form including all of the limitations of the base claim and any intervening claims, to overcome the under 35 U.S.C. 101 rejection.

Referring to Claims 4 and 30:

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither alone or in combination does not teach the method of Claims 1 and 29 wherein the new value of each child is determined using the equation:

$$\bar{x}' = \bar{x} + \sum R^T (R \sum R^T)^{-1} (\bar{y} - R\bar{x}),$$

in which $\bar{x}_i'$ comprises a vector of the new (demand) values of the children, $\bar{x}$ comprises a vector of the current demand values of the children, Σ comprises a matrix of the variations of the children, R comprises a matrix identifying the parent-child relationships, and $\bar{y}$ comprises a

vector of the new values/demand forecasts of the parents. The prior art is silent about the use of a matrix identifying the parent child relationships, and using this matrix to calculate new child values based on parent, child and variation matrices/vectors.

Referring to Claim 5:

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither alone or in combination does not teach the method of Claim 1 wherein the new value of each child is determined using the equation:

$$\bar{x}_i' = \bar{x}_i + \frac{\sigma_{i,i}}{\sum_i \sigma_{i,i}}(\bar{y} - \sum_i \bar{x}_i),$$

in which $\bar{x}_i'$ comprises the new value of the child i, $\bar{x}_i$ comprises the current value associated with a child i, $\sigma_{i,i}$ comprises the variation of the child i, $\sum_i \sigma_{i,i}$ comprises the sum of the current values for the children, and $\bar{y}$ comprises the new value of the parent of the child i. The prior art is silent as to the form of equation used to calculate child values, while applying the top-down analysis.

5. Claims 13, 14, 22, 23, 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to Claims 13, 22, 32 and 34:

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither alone or in combination does not teach the method of Claims 1, 10 and 19, 29, 31 and 33 wherein the new value of each child is determined using the equation:

$$\bar{x}' = \bar{x} + \sum R^T (R \sum R^T)^{-1} (\bar{y} - R\bar{x}),$$

in which $\bar{x}_i'$ comprises a vector of the new (demand) values of the children, $\bar{x}$ comprises a vector of the current demand values of the children, Σ comprises a matrix of the variations of the children, R comprises a matrix identifying the parent-child relationships, and $\bar{y}$ comprises a vector of the new values/demand forecasts of the parents. The prior art is silent about the use of a matrix identifying the parent child relationships, and using this matrix to calculate new child values based on parent, child and variation matrices/vectors.

Referring to Claims 14 and 23:

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither alone or in combination does not teach the method of Claims 1, 10 and 19, wherein the new value of each child is determined using the equation:

$$\bar{x}_i' = \bar{x}_i + \frac{\sigma_{i,i}}{\sum_i \sigma_{i,i}} (\bar{y} - \sum_i \bar{x}_i),$$

in which $\bar{x}_i'$ comprises the new value of the child i, $\bar{x}_i$ comprises the current value associated with a child i, $\sigma_{i,i}$ comprises the variation of the child i, $\sum_i \sigma_{i,i}$ comprises the sum of the current values for the children, and $\bar{y}$ comprises the new value of the parent of the child i. The prior art

is silent as to the form of equation used to calculate child values, while applying the top-down analysis.

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6119102 issued to Rush, Gary W. et al. Rush discloses An Manufacturing Requirements Planning system that operates on a single data set containing records for ***all item demands*** and supplies. The file may be opened under a ***demand*** alias and a supply alias to expedite MRP regeneration. A second item master extension file includes data for each item, which is subject to MRP, which further contributes to improved MRP regeneration time. Item low level codes for an item are recalculated in real time whenever a bill of material referencing the item is created or modified. Therefore, low level codes need not be calculated during MRP regeneration.

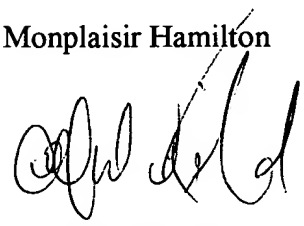
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on 1703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monplaisir Hamilton



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